National Stage of PCT Application No.: PCT/JP2005/021879 Amendment Dated: October 10, 2006

AMENDMENT TO THE ABSTRACT

The following abstract will replace all prior versions of the abstract in the application:

There is provided a method and so on capable A method of controlling an external force applied to an animal in such a way as to achieve as a target relation the relation between the external force and a motion variable varying with the motion of the animal.

A value of an external force f applied to a human leg according to an external force function f(x)—on<u>function f(x) on</u> the basis of a measured value of a myoelectric potential x that occurs in the human leg, current I of a motor 220 is controlled according to the set value, and the external force f is applied to the leg through an orthosis 222. A resultant force (the sum of an internal torque and an external torque around a knee joint) F is measured as "a motion variable." Moreover, a value of a factor γ is set according to a factor function $\gamma(f, F)$ on the basis of the set value of the external force f and the measured value of the resultant force F. If a deviation δ between the set value of the factor γ and target value γ_t thereof is equal to or greater than a reference value ϵ , a new external force function f(x) is set in such a way that the set value of the factor γ approaches the target value γ_t .